

AMENDMENTS TO THE CLAIMS

1. (currently amended) A method for acquiring seismic data while drilling a well, comprising;
 - (a) conveying at least one seismic receiver installed in a drill string wherein the receiver is controlled in part by an associated accelerometer that generates signals to control seismic data acquisition;
 - (b) generating coded seismic signals by a seismic source at a surface location;
 - (c) detecting the coded seismic signals with at least one sensor in the at least one seismic receiver at at least one location in the wellbore; and
 - (d) computing an arrival time for the detected coded seismic signals in the seismic receiver.
2. (Previously presented) The method of claim 1 wherein said computed arrival time is transferred to a surface processor.
3. (Original) The method of claim 1 wherein said computed arrival time is stored in the seismic receiver.
4. (Original) The method of claim 1 wherein said coded seismic signals further comprise timed discrete events.

5. (Original) The method of claim 1 wherein said coded seismic signals further comprise timed discrete frequencies.
6. (Original) The method of claim 1 further comprising a plurality of seismic receivers located along the drill string.
7. (currently amended) The method of claim 1 further comprising;
 - i) detecting the coded seismic signals with at least one sensor located at the surface; and
 - ii) storing the coded seismic signals detected by the at least one surface sensor in a surface processor.
8. (currently amended) The method of claim 1 further comprising transferring the signals computed arrival time stored in the seismic receiver to a surface processor upon removal of the drill string from the wellbore.
9. (currently amended) The method of claim 4 7 further comprising processing, according to programmed instructions, coded seismic signals detected at the surface ~~detected signals~~ and the seismic receiver ~~detected signals~~ to generate a seismic map.
10. (currently amended) A method for acquiring seismic data while drilling a well, comprising;

- (a) conveying at least one seismic receiver installed in a drill string wherein the receiver is controlled in part by an associated accelerometer that generates signals to control seismic data acquisition;
 - (b) generating coded seismic signals by a seismic source near a surface location;
 - (c) detecting the coded seismic signals with at least one sensor in the at least one seismic receiver at at least one location in the wellbore;
 - (d) computing, in the seismic receiver, a checkshot transit time for the detected coded seismic signals; and
 - (e) transferring said checkshot transit time to the surface.
11. (currently amended) A method for acquiring seismic data while operating a drill string in wellbore, comprising;
- (a) synchronizing, at the surface, a surface clock in a surface controller with a downhole clock in a seismic receiver;
 - (b) programming, at the surface, a processor in the seismic receiver to activate during at least one predetermined time window after a predetermined delay time,
 - (c) conveying the seismic receiver in the drill string to a location of interest in the wellbore;
 - (d) generating, under control of a surface processor, coded seismic signals by a seismic source near a surface location;

- (e) detecting the generated coded seismic source signals with a near-source sensor and storing said signals in the surface processor;
- (f) detecting the coded seismic signals with at least one sensor in the seismic receiver at a location of interest in the wellbore;
- (g) storing the detected coded seismic signals in the seismic receiver;
- (h) transferring the detected coded seismic signals from the seismic receiver to the surface processor; and
- (i) processing the signals detected by the near-source sensor ~~signals~~ and the seismic receiver ~~detected signals~~ according to programmed instructions to generate a seismic map.